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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Shinichi Yamada

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EXAMINER

YU, GINA C

ART UNIT

PAPER NUMBER

1617

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/857,495	Applicant(s) YAMADA ET AL.	
	Examiner GINA C. YU	Art Unit 1617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-82 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-82 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Receipt is acknowledged of amendment filed on May 1, 2008. Claims 19-82 are pending. Claim rejection made under 35 U.S.C. § 112, second paragraph, indicated in the previous Office action dated January 10, 2008, is withdrawn in view of the applicant's remarks. Claim rejections made under 35 U.S.C. § 103(a), indicated in the same Office action, are maintained for the reasons of record and reproduced below.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 19, 27-31, 35-54, 56, 57, 61-64, 69-71, 74, 79-81 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lambers et al. (US 5693677) in view of Oblong et al. (US 5939082).

Lambers teaches a cosmetic emulsion comprising a ceramide III derivative. The reference teaches that isocetyl alcohol is used to dissolve ceramide III and its derivative dissolve, and adding ethanol propylene glycol or butylene glycol further enhances the solubility. See Example 2; col. 3, lines 46 – 53. The suitable vehicles for the invention include water and liquids. See col. 4, lines 8 - 13. With respect to claim 57, "a composition to be applied to the hair" denotes the intended future use of the product made by the claimed method, and is not viewed patentably distinct from the claimed method of making a skin cosmetic.

While Lambers does not teach adding cationic surfactant, it is well known practice in cosmetic art to use cationic surfactants to stabilize oil-in-water emulsions, as

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shown in Oblong. See col. 13, lines 58 – col. 16, line 6. The reference also teaches that cosmetic compositions with low viscosity can be made with viscosity of about 50 cps or less. See col. 8, lines 20-25.

It would have been obvious to a skilled artisan to modify the cosmetic composition of Lambers by incorporating cationic surfactants as motivated by Oblong because the later teaches that cationic surfactants stabilizes oil-in-water emulsions. The skilled artisan would have had a reasonable expectation of successfully stabilizing an emulsion which contains ceramide III dissolved in liquid fatty alcohol such as isocetyl alcohol.

Claims 19, 20, 27-29, 32, 33, 52-54, 61, 56-58, 64-66, 69, 72-76, and 82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergmann (US 6110450) in view of Flick (Cosmetic and Toiletry Formulations, 1995).

The broadest claim in the instant case claims a liquid composition comprising at least one ceramide, at least one liquid fatty alcohol, and at least one cationic surfactant in a cosmetically acceptable medium, wherein the at least one fatty alcohol contains “no more than one hydroxyl group”, and wherein the composition has a viscosity of less than or equal to 1000 cPs. While the claim requires at least one liquid fatty alcohol with only one hydroxyl group in the composition, examiner construes the claim in such a way that it does not exclude the presence of liquid fatty alcohols with more than one hydroxyl groups. See MPEP § 2111.03. Examiner takes such position since the specification does not support excluding diols or triols from the composition. See In re Grasselli, 713 F.2d 731, 218 USPQ 769 (Fed. Cir. 1983).

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Bergmann teaches a hair care composition comprising at least one ceramide and/or glycosphingolipid in a cosmetically acceptable medium. See abstract. . The reference teaches using 0.001-1 % of phytantriol, which is a liquid fatty alcohol, with 0.001-1 % of ceramides. See col. 7, lines 39-45. Cationic surfactants are taught in col. 6, lines 27-34. Example 2 shows an aqueous formulation comprising oleoyldihydrosphingosine, cationic surfactants (components 1 and 4), and additives. See instant claims 57 and 58. The reference teaches the application of the composition in permanent hair waving composition. See col. 7, lines 19 – 26. The methods for treating and protecting hair in instant claims 64, 65, 74, and 75 are obvious use of the prior art composition.

The reference teaches that the final product may be in the form of liquid, but does not specifically mention the viscosity of hair liquid composition. See col. 7, lines 27 – 38.

Flick teaches a hair liquid formulation having a viscosity of 6 cps. See p. 65, Hair Liquid. The formulation contains 1 % of 2-hexyldecyl alcohol, which is a liquid branched fatty alcohol with one OH group. See instant claim 33. Varying the weight amount of the fatty alcohol to find an optimum weight range would have been within the skill of the art. See instant claim 34.

It would have been obvious to one of ordinary skill in the art at the time of the present invention to modify the teachings of Bergmann by formulating a hair liquid composition as taught by the reference. Since Bergmann teaches to make a hair liquid composition, the skilled artisan would have had a reasonable expectation of

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successfully making a hair liquid formulation of a low viscosity which is within the viscosity limitation of the claimed invention.

Claims 21-26, 34, 59, 60, 67, 68, and 77-78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergmann and Flick as applied to claims 19, 20, 27-29, 32, 33, 52-54, 61, 56-58, 64-66, 69, 72-76, and 82 as above, and further in view of Maubru (US 6312674 B1).

Bergmann and Flick fail to teach the specific ceramides of instant claims.

Maubru teaches oxidizing composition for bleaching or permanent reshaping hair, wherein the composition comprises ceramides disclosed in col. 3, line 21 – col. 16, line 13 in order to limit or prevent “deterioration in the mechanical properties of the hair”, particularly breaking of the hair and to obtain beautiful curls that withstand blow-drying and have good hold”. See col. 1, line 38 – col. 2, line 10. The reference specifically teaches bis(N-hydroxyethyl-N-cetyl)malonamide and 2-N-oleoylaminoctadecane-1,3-diol. See col. 5, lines 1 – 16. See instant claims 25-29. It is noted that oxidizing composition is used in “fixing step” in the permanent waving/straightening process. See col. 1, lines 1-29. Adding cationic polymers as a cosmetic additive is also suggested. See col. 5, lines 54 – 58; instant claim 19, 57, 64, and 74. The reference further teaches that the invention may contain other additives that are “known for their use in oxidizing compositions for bleaching or permanent reshaping of the hair”. The claimed process of treating is necessarily practiced when the composition is used according to the teaching in the prior art. Since the reference teaches that the composition may be

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in the form of lotion which may or may not be thickened, a low viscosity composition is also envisioned by Maubru. See col. 5, lines 44 – 45.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the compositions of the combined references by substituting the ceramides of Bergamann with the ceramides of Bergmann, as motivated by the latter, because 1) both Bergman and Maubru teach using ceramides in hair protecting compositions; and 2) Maubru teaches that the specific ceramides therein limits and prevents breaking of hair and damage due to blow-drying, and produces beautiful curls. The skilled artisan would have been motivated to combine the references in expectation of successfully producing a hair care composition which protects the hair from damages of chemical treatment.

Claims 35-51, 62, 63, 70, 71, 80, and 81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergmann, Flick, and Maubru as applied to claims 19, 20, 27-29, 32, 33, 52-54, 61, 56-58, 64-66, 69, 72-76, and 82 above, and further in view of Dubief et al. (US 6120757) (“Dubief”).

The combined references fail to teach the specific cationic surfactants of instant claims.

Dubief teaches a hair protection composition comprising quaternary ammonium surfactants. See col. 4, line 51 – col. 6, line 2; see instant claims 35-51. Adding ceramides is taught in col. 6, line 39. The reference discloses that the invention can be used in permanent waving, straightening products, for washing or rinsing, or as a leave-in product. See col. 6, lines 50 – 58. Since the reference teaches that the composition

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may be in the form of aqueous dispersion and spray, making a light viscosity composition comprising the said quaternary ammonium surfactants is suggested by the prior art. See col. 6, lines 24-28.

It would have been obvious to a skilled artisan to modify the hair liquid composition of the combined references by substituting the cationic surfactant of Bergmann with those of Dubief, as motivated by the latter, because 1) both Bergmann and Dubief are directed to hair protection compositions comprising conditioning agents, 2) Bergmann teaches using cationic surfactants such as quaternary ammonium salts; and 3) Dubief teaches the specific types of quaternary ammonium salts which are useful for the same hair conditioning purposes.

Claims 35-51, 55, 62, 63, 70, 71, 80, and 81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergmann and Flick as applied to claims 19, 20, 27-29, 32, 33, 52-54, 61, 56-58, 64-66, 69, 72-76, and 82 above, and further in view of Ochiai et al. (US 5587155) ("Ochiai").

Bergmann fails to teach 18-methyleicosanoic acid and the quaternary ammonium cationic surfactants of instant claims.

Ochiai teaches hair-conditioning composition comprising 18-methyleicosanoic acid. See Table 3; Example 7; col. 1, line 54 – col. 2, line 54. The reference teaches that the fatty acid prevents hair damage and adds resilience to the hair, and renders moisturizing and hair conditioning effects. See col. 7, lines 36 – col. 8, line 60 for the application of the invention. Quaternary ammonium salts are taught in col. 3, line 36 – col. 5, line 51.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the composition of the Bergmann references by adding a well known hair conditioning ingredient such as 18-methyleicosanoic acid as motivated by Ochiai because of the expectation of successfully producing a hair care products with hair protection, moisturizing, and conditioning effects.

Response to Arguments

Applicant's arguments filed May 1, 2008 have been fully considered but they are not persuasive in part.

Lambers in view of Oblong

Applicant asserts that the rejection made over Lambers in view of Oblong is improper because the references do not indicate the viscosity of their compositions in the same viscosity units as recited by applicant in the present claims. The argument is unpersuasive because the references in fact teach and suggest liquid form of emulsions having overlapping viscosity limitation.

In response to applicant's argument that the exemplary formulation provided by Lambers is in the form of a cream, applicant is reminded that Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. In re Susi, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). In this case, the reference also teaches liquid form of formulations in col. 4, lines 8 – 13, and does not in any way teach or suggest that the composition can be made only in the form of cream.

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Applicant also asserts that the rejection is invalid because kinematic viscosity of "50 centistokes or less" as described in Oblong is "entirely different" from dynamic viscosity of "50 centipose". The argument is unpersuasive because Oblong clearly indicates that the composition is in form of thin liquid, and even the kinematic viscosity of the thin liquid, described in 50 centistokes or less which reads on zero, certainly overlaps with applicant's own viscosity range, which also reads on zero. Thus Examiner views it proper to maintain the rejection.

Bergmann in view of Flick

Applicant asserts that Bergmann is limited to thick shampoo formulations and would not have rendered obvious to make a thin liquid formulations comprising ceramides as application has done. Examiner respectfully disagrees with applicant's view: as indicated in the rejection, as Bergmann teaches solution and fluid form of compositions also. See col. 7, lines 27 – 33.

Bergmann and Flick and further in view of Maubru

Applicant relies upon the previous arguments regarding the Bergmann/Flick rejection and argues that Maubru does not cure its alleged deficiency. Examiner respectfully disagrees for the above reason. Furthermore, as indicated in the rejection, a low viscosity composition comprising ceramides is also envisioned by Maubru. See col. 5, lines 44 – 45.

Bergmann, Flick, and Maubru and further in view of Dubief

Applicant relies upon the previous arguments regarding the Bergmann/Flick/Maubru rejection and argues that Dubief does not cure its alleged deficiency. Examiner respectfully disagrees for the above reason.

Bergmann and Flick and further in view of Ochiai

Applicant relies upon the previous arguments regarding the Bergmann/Flick rejection and argues that Ochiai does not cure its alleged deficiency. Examiner respectfully disagrees for the above reason.

Conclusion

No claims are allowed.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GINA C. YU whose telephone number is (571)272-8605.

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The examiner can normally be reached on Monday through Friday, from 8:00AM until 5:30 PM..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gina C. Yu/
Primary Examiner, Art Unit 1617